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SOURCE Central Scientific Research Boiler and Turbine Institute imeni I. I.
Polzunova, Vol. XVI, Teploperedacha i aerodinamika, Issue 5, Mashiz,
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DATA ON THE BOOK "HEAT TRANSFER AND AERODYNAMICS"

The book is a symposium of works of the Central Scientific Research Boiler and Turbine Institute (TsKTI), an organ of the Ministry of Heavy Machine Building USSR, and deals with the processes of high-intensity heat exchange.

The paper "Experimental Investigation of Heat Exchange and Resistance in the Subsonic Region" is a continuation of the investigations of the TsKTI on this subject. Experimental methods and the results obtained are presented in detail. A description is also given of characteristic phenomena occurring near the mouth of a tube during gas motion at near-sonic velocity. The article was written by four authors: Professor A. A. Gukhman, Doctor of Physicomathematical Sciences; N. V. Ilyukhin, Candidate of Technical Sciences; and Engineers A. F. Gandel'sman and L. N. Nauritis.

The article "Experimental Investigation of the Thermocouple Installed Longitudinally in a High-Speed Flow of Gas," by the same authors, is devoted to methods of temperature measurement in gas flow.

The article "Effect of the Rate of Circulation on Heat Exchange During Boiling," by L. S. Sterman and N. G. Styushin, Candidates of Technical Sciences, gives experimental data on heat exchange in boiling liquids under conditions of forced motion. Experiments were conducted during boiling on an immersed heat exchange surface, as well as during the boiling process in pipes, for a wide range of circulation rates. The effect of steam content on the intensity of heat loss during boiling in pipes was also investigated.

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